



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,407	02/12/2004	Miguel-Angel Garcia-Martin	P17982-US1	5790
27045	7590	09/25/2008		
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024				
EXAMINER				
HASHEM, LISA				
ART UNIT		PAPER NUMBER		
2614				
MAIL DATE		DELIVERY MODE		
09/25/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/777,407

Applicant(s)

GARCIA-MARTIN ET AL.

Examiner

LISA HASHEM

Art Unit

2614

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-13 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-13 and 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Amendment, filed 6-25-08, with respect to the rejection(s) of claim(s) 2-13 and 15-21 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made. Please see all rejection(s) below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-13, 15, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. Appl. Publ. No. 2004/0252674 by Soininen et al, hereinafter Soininen, as applied in view of Ejzak.

Regarding claim 2, the method according to claim 5, wherein Soininen discloses further comprising utilizing the circuit switched call to provide one or more conversational bearers (section 0028).

Regarding claim 3, the method according to claim 2, wherein Soininen discloses further comprising utilizing the packet switched session to provide non-conversational bearers established over said IP based packet switched network (section 0028).

Regarding claim 4, the method according to claim 5, wherein Soininen

discloses at least one of the peer user terminals is a dual mode mobile terminal (Fig. 5) capable of using both said packet switched and circuit switched access networks (section 0002; 0028; 0039).

Regarding claim 5, Soininen discloses a method of setting up a session between first (i.e. User A) and second (i.e. User B) peer user terminals (Fig. 5; Fig. 6: 90, 91) of a communication system (Fig. 1; Fig. 6) (section 0002; 0039), said session extending at least in part across a circuit switched access network (section 0002), the method comprising the steps of: establishing a packet switched session between the peer user terminals via an Internet Protocol, IP, based packet switched access network using a call control protocol (i.e. SIP) which is also used for setting up end-to-end packet switched sessions (section 0049), the step of establishing a packet switched session includes utilizing the Session Initiation Protocol, SIP, between at least one of the peer user terminals and a SIP server (i.e. SIP proxy; section 0010) of the mobile network (section 0046-0049); associating the packet switched session with a circuit switched telephone number (i.e. MSISDN number) (section 0042-0043); and setting up a circuit switched call between the peer user terminals in parallel with the packet switched session (section 0041-0043).

Soininen discloses establishing a packet switched session between a peer user terminal and a SIP server. However, Soininen does not disclose a SIP server of an IP Multimedia Core Network Subsystem (IMS).

Ejzak discloses a method of setting up a session between first and second peer user terminals (Fig. 1, 111; col. 2, lines 31-33; col. 3, lines 37-43; col. 4, lines 26-43) of a communication system (Fig. 1), said session extending at least in part across a circuit switched access network (i.e. PSTN; Fig. 1, 161), the method comprising the steps of: establishing a

packet switched session between the peer user terminals via an Internet Protocol, IP, based packet switched access network using a call control protocol (i.e. SIP) which is also used for setting up end-to-end packet switched sessions; and subsequently establishing said session based upon said signaling (col. 4, lines 26-40; col. 5, lines 35-52; col. 8, line 57 – col. 9, line 18).

Wherein Ejzak discloses the step of establishing a packet switched session includes utilizing the Session Initiation Protocol, SIP, between at least one of the peer user terminals and a SIP server (i.e. CSCF; Fig. 1, 143; col. 4, lines 34-40 and lines 46-50) of an IP Multimedia Core Network Subsystem (IMS) (Fig. 1, 141; (IMS)) (col. 5, lines 36-52; col. 8, line 57 – col. 9, line 11); associating the packet switched session with a circuit switched telephone number (col. 3, line 60 – col. 5, line 52); interworking between the circuit switched call and the packet switched session (col. 2, lines 21-24; col. 5, line 9 – col. 6, line 7).

Again, Soininen discloses the claimed method except Soininen includes a SIP server rather than a SIP server of an IP IMS. However, the claimed feature of a SIP server of an IP IMS was old and well known in the art. Ejzak clearly teaches such concept.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the user method of Soininen to include a SIP server of an IP IMS as taught by Ejzak. One of ordinary skill in the art would have been lead to make such a modification of Soininen to include a SIP server, such as the SIP server of Ejzak, to the mobile network of Soininen so the SIP server is included in an IP IMS that contains elements to provide IP based multimedia services in a packet switched session to a peer user terminal.

Regarding claim 6, the method according to claim 5, wherein Ejzak discloses said SIP server notifies a gateway server (i.e. MGW -> media gateway; Fig. 1, 148) when it receives a session initiation request which requires establishing at least one conversational bearer, the gateway server setting up the circuit switched call within the system (col. 3, lines 37-43; col. 4, lines 34-40; col. 5, lines 36-40).

Regarding claim 7, the method according to claim 6, wherein Ejzak discloses said SIP server and said gateway server are co-located (Fig. 1, 141) (col. 4, lines 10-24; col. 5, lines 6-13).

Regarding claim 8, the method according to claim 6, wherein Ejzak discloses the gateway server provides interworking between the circuit switched call and the packet switched session (col. 2, lines 21-24; col. 5, line 9 – col. 6, line 7).

Regarding claim 9, the method according to claim 8, wherein Ejzak discloses following notification from the SIP server, the gateway server notifies said at least one of the peer user terminals of a callback telephone number, and the peer user terminal calls that number to initiate the circuit switched call with the gateway server (col. 3, line 60 – col. 5, line 52).

Regarding claim 10, the method according to claim 9, wherein Ejzak discloses at least one peer terminal is notified of the callback number is via the SIP server (col. 3, line 60 – col. 5, line 52).

Regarding claim 11, the method according to claim 10, wherein Ejzak discloses the gateway server maps the established circuit switched call to the packet switched session based on the used callback number (col. 3, line 60 – col. 5, line 52).

Regarding claim 12, the method according to claim 9, wherein Ejzak discloses the gateway server selects the callback number from a pool of available callback numbers (col. 3, line 60 – col. 5, line 52).

Regarding claim 13, the method according to claim 5, further comprising Ejzak determining by the SIP server that said session requires setting up of a circuit switched call as a result of one or more of the following:

- properties of the system known to the SIP server;
- prior notification by said at least one of the peer user terminals;
- information contained in the SIP signaling initiating the session;
- properties defined for the peer user terminal;
- prior notification from a visited network if a peer user terminal is roaming;
- and prior notification from the radio access network used by the peer user terminal (col. 4, line 44 – col. 5, line 52; col. 8, line 57 – col. 9, line 18).

Regarding claim 15, Soininen discloses a user terminal (Fig. 5; section 0039; Fig. 6, 90: User A's terminal in a mobile network) comprising: means for using a circuit switched access network (Fig. 1; section 0002; 0040); means for using an Internet Protocol, IP, based packet switched access network (section 0002; 0040); and means for transferring signaling information, using a call control protocol which is also used for setting up end-to-end packet switched sessions, over the packet switched network to initiate in parallel, both a packet switched session over the packet switched network and a circuit switched call over the circuit switched network (Fig. 6; section 0041); wherein the means for transferring signaling information includes means

for transferring Session Initiation Protocol, SIP, signaling between the user terminal and a SIP server (i.e. SIP proxy) (section 0010; Fig. 6; 0041-0044).

Soininen discloses a user terminal transferring SIP signaling between the user terminal and a SIP server. However, Soininen does not disclose a SIP server of an IP Multimedia Core Network Subsystem (IMS).

Ejzak discloses user terminal (Fig. 1, 111; col. 3, lines 37-43) comprising means for using a circuit switched access network (i.e. PSTN; Fig. 1, 161) and means for using an Internet Protocol, IP, based packet switched access network (Fig. 1, 131; col. 3, lines 52-59); and means for transferring signaling information, using a call control protocol (i.e. SIP) which is also used for setting up end-to-end packet switched sessions, over the packet switched network to initiate a session over the circuit switched network (col. 4, lines 26-40; col. 5, lines 35-52), wherein the means for transferring signaling information includes means for transferring Session Initiation Protocol, SIP, signaling between the user terminal and a SIP server (i.e. CSCF; Fig. 1, 143; col. 4, lines 34-40 and lines 46-50) of an IP Multimedia Core Network Subsystem (IMS) (Fig. 1, 141; (IMS)) (col. 5, lines 36-52; col. 8, line 57 – col. 9, line 11).

Again, Soininen discloses the claimed user terminal except Soininen includes a SIP server rather than a SIP server of an IP IMS. However, the claimed feature of a SIP server of an IP IMS was old and well known in the art. Ejzak clearly teaches such concept.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the user terminal of Soininen to include a SIP server of an IP IMS as taught by Ejzak. One of ordinary skill in the art would have been lead to make such a modification of Soininen to include a SIP server, such as the SIP server of Ejzak, to the mobile network of

Soininen so the SIP server is included in an IP IMS that contains elements to provide IP based multimedia services to a user terminal utilizing SIP signaling.

Regarding claim 18, the user terminal of claim 15, wherein Soininen discloses the terminal is a dual mode mobile terminal (Fig. 5) capable of using said packet switched and circuit switched networks (section 0002; 0028; 0039-0040).

Regarding claim 19, the user terminal of claim 15, Soininen discloses further comprising: means for receiving a call-back number (i.e. MSISDN of terminal B) from a gateway (i.e. MSC; Fig. 6, 101) associated with said packet switched and circuit switched networks; and means for setting up a circuit switched call with said gateway by calling that call-back number (section 0042-0043).

4. Claims 16, 17, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ejzak in view of Soininen.

Regarding claim 16, Ejzak discloses a Session Initiation Protocol server (i.e. S-CSCF) for use in an Internet Protocol, IP, Multimedia Core Network Subsystem (Fig. 1, 141; (IMS)) (col. 5, lines 41-52), the server comprising: means for receiving an INVITE request from a user terminal (i.e. mobile unit) (col. 8, lines 57-65), over an IP based packet switched domain (Fig. 1, 131; col. 3, lines 52-59), initiating a packet switched session; means for determining that the packet switched session requires setting up of at least one circuit switched conversational bearer (i.e. PSTN; Fig. 1, 161); and means for causing the at least one conversational bearer to be set up (col. 8, line 7 – col. 9, line 11).

Ejzak discloses interworking between circuit switched and packet switched networks. However, Ejzak does not disclose both a packet switched session and a circuit switched call in parallel.

Soininen discloses a SIP server (i.e. SIP proxy) for use in a mobile network (section 0010; 0044). Soininen discloses a mobile network comprising: means for receiving an INVITE request (section 0041-0042) from a user terminal (Fig. 5; section 0039; Fig. 6, 90: User A's terminal in a mobile network), over an IP based packet switched domain (section 0002; Fig. 6), initiating a packet switched session (section 0049); means for determining that the packet switched session requires setting up of at least one circuit switched conversational bearer; and means for causing the at least one conversational bearer to be set up in parallel with the packet switched session (section 0041-0043).

Again, Ejzak discloses the claimed SIP server except Ejzak includes interworking between circuit switched and packet switched networks rather than a packet switched session and a circuit switched call in parallel. However, the claimed feature of a packet switched session and a circuit switched call in parallel was old and well known in the art. Soininen clearly teaches such concept.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the SIP server of Ejzak to include means for causing the at least one conversational bearer to be set up in parallel with the packet switched session as taught by Soininen. One of ordinary skill in the art would have been lead to make such a modification of Ejzak to include means for causing the at least one conversational bearer to be set up in parallel with the packet switched session, such as the mobile network of Soininen, to the SIP server of

Ejzak so the SIP server can set up a circuit switched session and packet switched session to carry voice and data.

Regarding claim 17, Ejzak discloses a gateway server (i.e. MGW -> media gateway; Fig. 1, 148) for providing an interface between a circuit switched access network (i.e. PSTN; Fig. 1, 161) and a packet switched network (Fig. 1, 131; col. 3, lines 52-59) (col. 2, lines 21-24; col. 5, line 9 – col. 6, line 7), the gateway server having an interface towards a Session Initiation Protocol, SIP, server (i.e. CSCF; Fig. 1, 143; col. 4, lines 34-40 and lines 46-50) of an Internet Protocol, IP, Multimedia Core Network Subsystem (Fig. 1, 141; (IMS)) (col. 5, lines 41-52), said gateway server comprising: means for receiving from the SIP server, signaling instructing the setting up of a circuit switched call over the circuit switched access network with a user terminal (Fig. 1, 111) (col. 3, lines 37-43; col. 4, lines 34-40; col. 5, lines 36-40).

Ejzak discloses interworking between circuit switched and packet switched networks. However, Ejzak does not disclose both a packet switched session and a circuit switched call in parallel.

Soininen discloses a gateway server (i.e. MSC; Fig. 6, 101) for providing an interface between a circuit switched access network and a packet switched network (Fig. 1; section 0002; Fig. 6; section 0041-0044), the gateway server having an interface towards a Session Initiation Protocol, SIP, server (i.e. SIP proxy; section 0010; 0044), said gateway server comprising: means for receiving, signaling instructing the setting up of a circuit switched call over the circuit switched access network with a user terminal (section 0041-0042); and means for setting up the circuit switched call in parallel with a packet switched session (section 0041-0044).

Again, Ejzak discloses the claimed gateway server except Ejzak includes interworking between circuit switched and packet switched networks rather than a packet switched session and a circuit switched call in parallel. However, the claimed feature of a packet switched session and a circuit switched call in parallel was old and well known in the art. Soininen clearly teaches such concept.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gateway server of Ejzak to include means for causing the at least one conversational bearer to be set up in parallel with the packet switched session as taught by Soininen. One of ordinary skill in the art would have been lead to make such a modification of Ejzak to include means for causing the at least one conversational bearer to be set up in parallel with the packet switched session, such as the mobile network of Soininen, to the gateway server of Ejzak so the gateway server can set up a circuit switched session and packet switched session to carry voice and data.

Regarding claim 20, the server of Claim 16, wherein Ejzak discloses further comprising means for notifying a gateway server upon determining that the at least one conversational bearer in the circuit switched domain is required (col. 3, lines 37-43; col. 4, lines 34-40; col. 5, lines 36-40) and causing said gateway server to provide a call-back number to said user terminal (col. 3, line 60 – col. 5, line 52).

Regarding claim 21, the gateway server of Claim 17, wherein Ejzak discloses further comprising means for providing said user terminal with a call-back number for said user terminal to call to initiate a circuit switched call with said gateway server (col. 3, line 60 – col. 5, line 52).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.
6. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Or call:

(571) 272-2600 (for customer service assistance)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LISA HASHEM whose telephone number is (571)272-7542. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fan Tsang/

Supervisory Patent Examiner, Art Unit 2614

/Lisa Hashem/
Examiner, Art Unit 2614
September 16, 2008